INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
e make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P. O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Essex Group Inc. - Metals Processing Center
2601 South 600 East
Columbia City, Indiana 46725

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain New Source Review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T183-6488-00016	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a secondary copper plant that produces copper rods and bars.

Responsible Official:	Director of Operations, Metals Processing
Source Address:	2601 South 600 East, Columbia City, IN 46725
Mailing Address:	2601 South 600 East, Columbia City, IN 46725
Source Phone Number:	(260) 248-5553
SIC Code:	3351 and 3357
County Location:	Whitley
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Rotary Furnaces

(a) Two (2) natural gas-fired Rotary Furnaces, identified as North Rotary Furnace and South Rotary Furnace (P-1), each constructed in 1985, each with a maximum heat input capacity of 22 MMBtu/hr and a maximum capacity of 1.43 tons of copper per hour, with emissions controlled by a baghouse, and exhausting to stack S-1.

Copper Rod and Bar Manufacturing

(b) One (1) Copper Rod and Bar Manufacturing Process, identified as 091 Line, constructed in 1975, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-4, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(c) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 West Line, constructed in 1985, a maximum charging capacity of 20 tons of copper per hour and melt

capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-2, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(d) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 East Line, constructed in 1994, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-3, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

091 Alcohol Quench Process

(e) One (1) Mill Emulsion System, identified as 091 Line Mill Emulsion System (P-3), constructed in 1975, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, with emissions uncontrolled, exhausting to vent V-5.

(f) One (1) Alcohol Quench System, identified as 091 Line Quench System (P-3), constructed in 1975, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, with emissions uncontrolled, exhausting to vent V-5.

The maximum capacity of the 091Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 West Alcohol Quench Process

(g) One (1) Mill Emulsion System, identified as 055 West Line Mill Emulsion System (P-5), constructed in 1985, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

(h) One (1) Alcohol Quench System, identified as 055 West Line Quench System (P-5), constructed in 1985, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

The maximum capacity of the 055 West Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 East Alcohol Quench Process

(i) One (1) Mill Emulsion System, identified as 055 East Line Mill Emulsion System (P-6), constructed in 1994, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

(j) One (1) Alcohol Quench System, identified as 055 East Line Quench System (P-6), constructed in 1994, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

The maximum capacity of the 055 East Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

Storage Tanks

(k) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(l) One (1) 7,500 gallon quench solution storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(m) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(n) One (1) 7,500 gallon quench solution storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(o) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1975, used in conjunction with the 091 Alcohol Quench Process.

(p) One (1) 7,500 gallon quench solution storage tank, constructed in 1994, used in conjunction with the 091 Alcohol Quench Process.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(b) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume. [326 IAC 6-3-2]

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: one (1) 2.5 MMBtu/hr Clayton boiler [326 IAC 6-2-4].

(e) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

by this permit.

(b) All previous registrations and permits are superseded by this permit.

B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.16 Permit Renewal [326 IAC 2-7-4]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

(1) A timely renewal application is one that is:

(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]

If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.17 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;

(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.21 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]

(a) Pursuant to 40 CFR 52 Subpart P, particulate matter emissions from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

(b) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control

The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its

control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(b) Whenever a condition in this permit requires the measurement of a temperature or flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

(c) The Preventive Maintenance Plan for the pH meter shall include calibration using known standards. The frequency of calibration shall be adjusted such that the typical error found at calibration is less than one pH point.

(d) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) If the ERP is disapproved by IDEM, OAQ,, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:

(1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

(2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, and it will be 10 days or more until the unit or device will be shut down, then the Permittee shall promptly notify the IDEM, OAQ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

(4) Failure to take reasonable response steps shall be considered a deviation from the permit.

(c) The Permittee is not required to take any further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied.

(3) An automatic measurement was taken when the process was not operating.

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.

(e) The Permittee shall record all instances when, in accordance with Section D, response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the

Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1st of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or

electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Rotary Furnaces

(a) Two (2) natural gas-fired Rotary Furnaces, identified as North Rotary Furnace and South Rotary Furnace (P-1), each constructed in 1985, each with a maximum heat input capacity of 22 MMBtu/hr and a maximum capacity of 1.43 tons of copper per hour, with emissions controlled by a baghouse, and exhausting to stack S-1.

Copper Rod and Bar Manufacturing

(b) One (1) Copper Rod and Bar Manufacturing Process, identified as 091 Line, constructed in 1975, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-4, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(c) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 West Line, constructed in 1985, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-2, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(d) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 East Line, constructed in 1994, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-3, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter - Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Any change or modification which increases the total potential emissions from the North and South rotary furnaces and the 055 West Copper Rod and Bar Manufacturing Line to equal to or greater than 25 tons of PM per year must receive prior approval from IDEM, OAQ.

D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from:

(a) Each rotary furnace shall not exceed 5.21 pounds per hour when operating at a process weight rate of 1.43 tons per hour, each.

(b) Each copper bar and rod manufacturing process (identified as the 055 West, 055 East and 091 lines) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20 tons per hour, each.

The pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required these facilities and any control devices.

Compliance Determination Requirements

D.1.4 Particulate Control

In order to comply with Condition D.1.2, the baghouse shall control particulate emissions from the rotary furnaces at all times when the rotary furnaces are in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred and eighty (180) days after issuance of this Part 70 permit, in order to ensure that the requirements of 326 IAC 2-2 do not apply, the Permittee shall perform PM testing on stack S-1 (exhausting emissions from the rotary furnaces) and stack S-2 (exhausting emissions from the 055 West Copper Bar and Rod Manufacturing Process) utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of the exhaust from the rotary furnaces and copper bar and rod manufacturing processes (exhausting to stacks S-1, S-2, S-3, and S-4) shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring - Baghouses

The Permittee shall record the total static pressure drop across the baghouse used to control emissions from the rotary furnaces, at least once per shift when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags used to control emissions from the rotary furnaces. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units

and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.6, the Permittee shall maintain once per shift records of the visible emission notations required per Condition D.1.6.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain once per shift records of the total static pressure drop required by Condition D.1.7.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required by Condition D.1.8.

(d) To document compliance with Condition D.1.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

091 Alcohol Quench Process

(e) One (1) Mill Emulsion System, identified as 091 Line Mill Emulsion System (P-3), constructed in 1975, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, with emissions uncontrolled, exhausting to vent V-5.

(f) One (1) Alcohol Quench System, identified as 055 West Line Quench System (P-3), constructed in 1975, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, with emissions uncontrolled, exhausting to vent V-5.

The maximum capacity of the 091Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 West Alcohol Quench Process

(g) One (1) Mill Emulsion System, identified as 055 West Line Mill Emulsion System (P-5), constructed in 1985, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

(h) One (1) Alcohol Quench System, identified as 055 West Line Quench System (P-5), constructed in 1985, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

The maximum capacity of the 055 West Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 East Alcohol Quench Process

(i) One (1) Mill Emulsion System, identified as 055 East Line Mill Emulsion System (P-6), constructed in 1994, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

(j) One (1) Alcohol Quench System, identified as 055 East Line Quench System (P-6), constructed in 1994, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

The maximum capacity of the 055 East Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Best Available Control Technology (BACT) for VOC [326 IAC 2-2] [326 IAC 8-1-6]

Pursuant to SSM 183-14400-00016, issued July 9, 2003, 326 IAC 2-2-3 (Prevention of Significant Deterioration) and 326 IAC 8-1-6 (BACT), the Permittee shall comply with the following BACT requirements:

(a) The average VOC (2-Propanol) input to the 055 East and 055 West Alcohol Quench Systems (P-5 and P-6) and 055 East and 055 West Mill Emulsion Systems (P-5 and P-6) shall not exceed 300 pounds per hour per system. Compliance will be determined each calender month by totaling the VOC input to the system for the calender month and dividing by the total operating hours for the calender month.

(b) The recuperative thermal oxidizer, identified as CE-03, shall control VOC emissions from the 055 East and 055 West Alcohol Quench Systems and Mill Emulsion Systems (P-5 and P-6) and achieve a minimum one-hundred percent (100%) capture efficiency and ninety-eight percent (98%) destruction efficiency.

Compliance with these requirements will satisfy the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 8-1-6 (BACT).

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and the recuperative thermal oxidizer.

Compliance Determination Requirements

D.2.3 Volatile Organic Compound (VOC)

Pursuant to SSM 183-14400-00016, issued July 9, 2003 and in order to demonstrate compliance with Condition D.2.1, the recuperative thermal oxidizer (CE-03) shall:

(a) Operate at all times when the 055 East and 055 West Alcohol Quench Systems (P-5 and P-6) and 055 East and 055 West Mill Emulsion Systems (P-5 and P-6) are in operation.

(b) Maintain a minimum ninety-eight percent (98%) destruction efficiency and one-hundred percent (100%) capture efficiency.

D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Pursuant to SSM 183-14400-00016, issued July 9, 2003, between January 1, 2004 and July 31, 2004, the Permittee shall conduct a performance test to determine compliance with Condition D.2.1 for the recuperative thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration.

D.2.5 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature of the recuperative thermal oxidizer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as an hourly average. If the continuous monitoring system is not in operation, the temperature will be recorded manually once in a 15-minute period. Nothing in this permit shall excuse the Permittee from complying with the requirement to continuously monitor the temperature of the recuperative thermal oxidizer.

(b) From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature of 1456?F. The Permittee shall determine the minimum hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1, as approved by IDEM.

(c) The Permittee shall then operate the thermal oxidizer at or above the minimum hourly average temperature as observed during the most recent compliant stack test following approval of that temperature.

D.2.6 Parametric Monitoring

(a) The Permittee shall determine the appropriate fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1 as approved by IDEM.

(b) The Permittee shall observe the fan amperage at least once per day when the thermal oxidizer is in operation. The oxidizer fan amperage shall be maintained within the normal range of 206 to 213 amps or as established in the most recent compliant stack test.

Record Keeping and Reporting [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.1, the Permittee shall maintain monthly purchase records of the VOC input to, and operating hours of, the 055 West and 055 East Alcohol Quench Systems (P-5 and P-6) and the 055 West and 055 East Mill Emulsion Systems (P-5 and P-6).

(b) To document compliance with Conditions D.2.5 and D.2.6, the Permittee shall maintain records of:

(1) The continuous temperature records (reduced to 1-hour block averages) for the thermal oxidizer and the hourly average temperature used to demonstrate compliance during the most recent compliant stack test.

(2) The daily records of the fan amperage.

(c) To document compliance with Condition D.2.2, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Storage Tanks

(k) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(l) One (1) 7,500 gallon quench solution storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(m) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(n) One (1) 7,500 gallon quench solution storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(o) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1975, used in conjunction with the 091 Alcohol Quench Process.

(p) One (1) 7,500 gallon quench solution storage tank, constructed in 1994, used in conjunction with the 091 Alcohol Quench Process.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

The two (2) 17,000 gallon mill emulsion storage tanks and two (2) 7,500 gallon quench solution storage tanks are an indivisible part of the 055 West and 055 East Alcohol Quench Systems (P-5 and P-6) and 055 West and 055 East Mill Emulsion Systems (P-5 and P-6). VOC emissions from these tanks have been accounted for in the review of the 055 West and 055 East Alcohol Quench Systems (P-5 and P-6) and 055 West and 055 East Mill Emulsion Systems (P-5 and P-6). As a result, pursuant to SSM 183-14400-00016, issued **XXX**, compliance with the BACT requirements established in section D.2 will serve as BACT for the two (2) 17,000 gallon mill emulsion storage tanks and two (2) 7,500 gallon quench solution storage tanks that are used in conjunction with the 055 West and 055 East Alcohol Quench Processes.

D.3.2 40 CFR Part 60, Subpart Kb (Volatile Organic Storage Vessels)

(a) The two (2) 17,000 gallon mill emulsion storage tanks (used in conjunction with the 055 West and 055 East Alcohol Quench Processes) are subject to 40 CFR Part 60, Subpart Kb because the maximum capacity of each tank is greater than 40 m^3 that is used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. Pursuant to this rule, the Permittee must maintain records as required by 40 CFR 60.116(a) and 60.116(b).

(b) All tanks are exempt from the General Provisions (Part 60, subpart A) and from the provisions of subpart Kb, except as specified in 40 CFR 60.116(a) and 60.116(b), because the tanks have a capacity less than 75 m^3 storing liquid.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.3 Record Keeping Requirements

To document compliance with Condition D.3.2, the Permittee shall keep readily accessible records showing the dimension of the storage tanks and an analysis showing the capacity of the storage tanks.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Specifically Regulated Insignificant Activities

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(b) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume. [326 IAC 6-3-2]

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: forty-seven (47) 0.2 MMBtu/hr heaters, fifteen (15) 0.15 MMBtu/hr heaters, fourteen (14) 0.09 MMBtu/hr heaters, five (5) 0.14 MMBtu/hr heaters, three (3) 0.17 MMBtu/hr heaters, one (1) 0.39 MMBtu/hr heater, and one (1) 2.5 MMBtu/hr Clayton boiler [326 IAC 6-2-4].

(e) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the insignificant welding, brazing, cutting torch, soldering operations, and furnaces with a capacity less than 450 cubic inches by volume, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

D.4.2 Particulate Matter Emission Limitations for Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4, the particulate matter emissions from the 2.5 MMBtu/hr natural gas-fired boiler shall not exceed 0.86 pounds per million BTU heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Pt = Pounds of particulate matter emitted per million Btu (lb/MMBtu) heat input.

Q = Total source maximum operating capacity rating in million Btu per hour (MMBtu/hr) heat input. The maximum operating capacity is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case,

the capacity specified in the operation permit shall be used (Q = 2.5 MMBtu/hr).

D.4.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 , the owner or operator of cold cleaning degreasing (item (c) in the facility description) operations constructed after January 1, 1980, shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements; and

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.4.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility (item (c) in the facility description) construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Essex Group Inc., Metals Processing Center
Source Address: 2601 South 600 East, Columbia City, Indiana 46725
Mailing Address: : 2601 South 600 East, Columbia City, Indiana 46725
Part 70 permit No.: T183-6488-00016

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

? Annual Compliance Certification Letter

? Test Result (specify) _____

? Report (specify) _____

? Notification (specify) _____

? Affidavit (specify) _____

? Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Essex Group Inc., Metals Processing Center
Source Address: 2601 South 600 East, Columbia City, Indiana 46725
Mailing Address: : 2601 South 600 East, Columbia City, Indiana 46725
Part 70 permit No.: T183-6488-00016

This form consists of 2 pages **Page 1 of 2**

? This is an emergency as defined in 326 IAC 2-7-1(12)

? The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and

? The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: Essex Group Inc., Metals Processing Center
Source Address: 2601 South 600 East, Columbia City, Indiana 46725
Mailing Address: : 2601 South 600 East, Columbia City, Indiana 46725
Part 70 permit No.: T183-6488-00016
Facility: 055 East Alcohol Quench System and Mill Emulsion System; 055 West Alcohol Quench System and Mill Emulsion System
Parameter: VOC
Limit: 300 pounds per hour per process

Note that a separate report must be completed for the 055 East and 055 West systems.

YEAR: _____

Month	Column 1: VOC input (lb/month)	Column 2: Operating hours (hr/month)	Column 1/ Column 2: average VOC input (lb/hr)
Month 1:			
Month 2:			
Month 3:			

? No deviation occurred in this quarter.

? Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Essex Group Inc., Metals Processing Center
Source Address: 2601 South 600 East, Columbia City, Indiana 46725
Mailing Address: : 2601 South 600 East, Columbia City, Indiana 46725
Part 70 permit No.: T183-6488-00016

Months: _____ **to** _____ **Year:** _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

? NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

? THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Background and Description

Source Name:	Essex Group, Inc. - Metals Processing Center
Source Location:	2601 South 600 East, Columbia City, Indiana 46725
County:	Whitley
SIC Code:	3351 and 3357
Operation Permit No.:	T183-6488-00016
Permit Reviewer:	ERG/BS

On August 18, 2003, the Office of Air Quality (OAQ) had a notice published at the Peabody Public Library, 1160 East Highway 205, Columbia City, IN 46725 and in the Post & Mail newspaper of Columbia City stating that Essex Group, Inc. ("Essex") had applied for Part 70 permit for the operation of a stationary copper rod and bar processing plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On August 30, 2003, Essex submitted comments on the proposed Part 70 permit. The following is a summary of the comments and responses to those comments. The Table Of Contents has been modified, if applicable, to reflect any changes.

Comment 1:

Proposed Condition D.1.6 requires visible emission monitoring of the stack exhaust from the rotary furnaces and copper bar and rod manufacturing processes on a once per shift basis. These facilities historically, though not currently, operate on two 12-hour shifts per day. When the plant returns to the 12-hour shift schedule, we do not want this requirement to become an exercise in "sun-watching." As a result, please change the requirement to state that visible emission notations are required once per day instead of once per shift.

Response to Comment 1:

Visible emissions notations are required to indicate compliance with 326 IAC 5-1, 326 IAC 6-3-2, and 326 IAC 2-2. This monitoring requirement is designed: 1) as a trigger for the source to perform some corrective action on the facility if visible emissions are abnormal, and 2) to ensure continuous compliance with the respective emission limitations. IDEM believes that once per shift notations are reasonable, adequate, and necessary to demonstrate continuous compliance with permit requirements. Once per shift, as opposed to once per day, monitoring can minimize lag time in addressing control failure which can occur suddenly and during any shift. Essex has not provided sufficient information to demonstrate that daily visible emission notations will ensure continuous compliance. Therefore, when more than one shift occurs during daylight hours, visible emissions notations shall be made during each shift.

No changes were made as a result of this comment.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified, if applicable, to reflect these changes.

1. The OAQ has decided to move the provision that is required by 326 IAC 2-7-5(6) from Condition B.8 to the cover page of the permit. OAQ has also added a sentence to the cover that identifies this permit as addressing some New Source Review requirements.

~~B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]~~

~~(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:~~

~~(1) Enforcement action;~~

~~(2) Permit termination, revocation and reissuance, or modification; or~~

~~(3) Denial of a permit renewal application.~~

~~(b) Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.~~

~~(c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.~~

~~(d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.~~

(cover page)

PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Essex Group Inc. - Metals Processing Center
2601 South 600 East
Columbia City, Indiana 46725

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and re-issuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. **This permit also addresses certain New Source Review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions.**

Operation Permit No.: T183-6488-00016	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

4. The notification requirement in C.16 has been modified to apply only to situations where the emissions unit will continue to operate for an extended time while the compliance monitoring parameter is out of range. This provides OAQ an opportunity to assess the situation and determine whether any additional actions are necessary to demonstrate compliance with applicable requirements.

C.16 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5] [326 IAC 2-7-6]

...

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:

(3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, **and it will be 10 days or more until the unit or device will be shut down, then the Permittee shall promptly notify** the IDEM, OAQ ~~shall be promptly notified~~ of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.

3. The OAQ has decided to make the following changes regarding the detection of broken or failed bags in a baghouse:

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. ~~Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions).~~ Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. **If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name:	Essex Group, Inc. - Metals Processing Center
Source Location:	2601 South 600 East, Columbia City, Indiana 46725
County:	Whitley
SIC Code:	3351 and 3357
Operation Permit No.:	T183-6488-00016
Permit Reviewer:	ERG/BS

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Essex Group, Inc. relating to the operation of a copper rod and bar processing facility.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Rotary Furnaces

(a) Two (2) natural gas-fired Rotary Furnaces, identified as North Rotary Furnace and South Rotary Furnace (P-1), each constructed in 1985, each with a maximum heat input capacity of 22 MMBtu/hr and a maximum batch capacity of 40 tons of copper, with emissions controlled by a baghouse, and exhausting to stack S-1.

Copper Rod and Bar Manufacturing

(b) One (1) Copper Rod and Bar Manufacturing Process, identified as 091 Line, constructed in 1975, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-4, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(c) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 West Line, constructed in 1985, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-2, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

(d) One (1) Copper Rod and Bar Manufacturing Process, identified as 055 East Line, constructed in 1994, a maximum charging capacity of 20 tons of copper per hour and melt capacity of 15 tons per hour, with emissions uncontrolled, exhausting to stack S-3, and consisting of:

(1) One (1) natural gas-fired vertical melt furnace, with a heat input capacity of 24 MMBtu/hr,

(2) One (1) holding furnace, with a heat input capacity of 2.0 MMBtu/hr,

(3) One (1) tundish, with a heat input capacity of 1.5 MMBtu/hr, and

(4) Various ancillary launders, with an aggregate heat input capacity of 2.5 MMBtu/hr.

091 Alcohol Quench Process

(e) One (1) Mill Emulsion System, identified as 091 Line Mill Emulsion System (P-3), constructed in 1975, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, with emissions uncontrolled, exhausting to vent V-5.

(f) One (1) Alcohol Quench System, identified as 091 Line Quench System (P-3), constructed in 1975, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, with emissions uncontrolled, exhausting to vent V-5.

The maximum capacity of the 091Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 West Alcohol Quench Process

(g) One (1) Mill Emulsion System, identified as 055 West Line Mill Emulsion System (P-5), constructed in 1985, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

(h) One (1) Alcohol Quench System, identified as 055 West Line Quench System (P-5), constructed in 1985, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-6 and stack S-10.

The maximum capacity of the 055 West Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

055 East Alcohol Quench Process

(i) One (1) Mill Emulsion System, identified as 055 East Line Mill Emulsion System (P-6), constructed in 1994, which pumps a mill emulsion solution containing 0.2% - 2.5% by volume IPA through sprays in an enclosed rolling mill stand area, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

(j) One (1) Alcohol Quench System, identified as 055 East Line Quench System (P-6), constructed in 1994, which pumps a quench solution containing 0.8% - 3.0% by volume IPA through ejectors into tubes, emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to vent V-7 and stack S-10.

The maximum capacity of the 055 East Line (Mill Emulsion System and Alcohol Quench System) is 300 pounds of 2-Propanol (IPA) per hour.

Storage Tanks

(k) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(l) One (1) 7,500 gallon quench solution storage tank, constructed in 1985, used in conjunction with the 055 West Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(m) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(n) One (1) 7,500 gallon quench solution storage tank, constructed in 1994, used in conjunction with the 055 East Alcohol Quench Process, with emissions controlled by a recuperative thermal oxidizer, identified as CE-03, exhausting to stack S-10.

(o) One (1) 17,000 gallon mill emulsion storage tank, constructed in 1975, used in conjunction with the 091 Alcohol Quench Process.

(p) One (1) 7,500 gallon quench solution storage tank, constructed in 1975, used in conjunction with the 091 Alcohol Quench Process.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

Insignificant Activities

The source consists of the following insignificant activities:

(a) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment cutting torches, soldering equipment, welding equipment. [326 IAC 6-3-2]

(b) Furnaces used for melting metals other than beryllium with a brim full capacity of less than or equal to 450 cubic inches by volume. [326 IAC 6-3-2]

(c) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]

(d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

(e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: forty-seven (47) 0.2 MMBtu/hr heaters, fifteen (15) 0.15 MMBtu/hr heaters, fourteen (14) 0.09 MMBtu/hr heaters, five (5) 0.14 MMBtu/hr heaters, and three (3) 0.17 MMBtu/hr heaters.

(f) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

(g) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons; Vessels storing lubricating oils, hydraulic oils, and machining fluids.

(h) Refractory storage not requiring air pollution control equipment

(i) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(j) Cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15mm Hg; or 0.3 psi measured at 38 degrees C (100^{o}F).

(k) Noncontact, forced and induced, draft cooling tower system not regulated under a NESHAP.

(l) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

(m) Heat exchanger cleaning and repair.

(n) Filter or coalescer media changeout.

(o) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(p) Emergency generators as follows: gasoline generators not exceeding 110 horsepower; diesel generators not exceeding 1600 horsepower; natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.

(q) Stationary fire pumps.

(r) Purge double block and bleed valves.

(s) Activities with emissions equal to or less than the following thresholds: 5 tons per year PM or PM10, 10 tons per year SO_2, NO_x, or VOC, 0.2 tons per year Pb, 1.0 tons per year of a single HAP, or 2.5 tons per year of any combination of HAPs:

(1) One wire drawing process involving rod breakdown;

(2) Four (4) above-ground IPA storage tanks with fixed roof cone tanks with a capacity

of 7,773 gallons each; and

(3) Two (2) 17-gallon parts washers.

Existing Approvals

The source has constructed and has been operating under the following previous approvals including:

(a) Registration issued November 3, 1983;

(b) Construction Permit PC (92) 1577, issued March 21, 1985;

(c) Operation Permit 92-05-89-0066, issued July 15, 1985;

(d) Registration 183-3610-00016, issued April 4, 1994; and

(e) SSM 183-14400-00016, issued July 9, 2003.

All terms and conditions from previous permits issued pursuant to permittting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 permit:

(a) Conditions 1 and 2 from CP (92) 1577, issued March 21, 1985:
The PM emissions from the two rotary furnaces shall not exceed 40 tons per year per furnace. The PM emissions from the 055 West vertical shaft furnace shall not exceed 95 tons per year.

Revised Condition:
In order to render the requirements of 326 IAC 2-2 not applicable:

(1) The total amount of copper produced by the North and South rotary furnaces shall not exceed 23,800 tons per twelve consecutive month period with compliance determined at the end of each month and 1.13 lb of PM per ton of copper produced. Compliance with this limit is equivalent to less than or equal to 13.5 tons of PM per year.

(2) The amount of copper produced by the 055 West Copper Bar and Rod Manufacturing Process shall not exceed 124,830 tons per twelve consecutive month period with compliance determined at the end of each month and 0.175 lb of PM per ton of copper produced. Compliance with this limit is equivalent to less than or equal to 10.9 tons of PM per year.

Reason revised:
Prior to the issuance of CP (92) 1577, it was believed that the source was a PSD minor source. As a result, the addition of the two rotary furnaces and 055 West Copper Rod and Bar Manufacturing process were limited as stated above. However, during the Part 70 review process, the OAQ determined that the source was an existing PSD major source upon promulgation of the PSD rules and prior to the issuance of CP (92) 1577. Therefore, the limits established via CP (92) 1577, issued March 21, 1985, have been revised to ensure that the total PM emissions from the modification permitted in 1985 (two rotary furnaces and 055 West Copper Rod and Bar Manufacturing process) remain below the

applicable PSD threshold of 25 tons of PM per year. Compliance with these limits is equivalent to less than or equal to 24.4 tons of PM per year. Note that the actual emissions from these facilities have never exceeded 25 tons of PM per year.

The following terms and conditions from previous approvals were not incorporated into this Part 70 permit:

(a) All construction conditions from all previously issued permits.

Reason not incorporated: All previously permitted facilities have already been constructed; therefore, the construction conditions are no longer necessary as part of the operating permit. Any facilities that were previously permitted but have not yet been constructed would need new pre-construction approval before beginning construction.

(b) All conditions from Registration issued November 3, 1983;

Reason not incorporated:
The PVC Mixing Area is no longer in operation and has been removed from the source.

Enforcement Issue

The source has the following enforcement actions pending:

(1) Violation of 326 IAC 2-5.1-3 (Permits) for the construction and operation of the 055 West and 055 East Alcohol Quench Processes.

(2) Violation of 326 IAC 2-2 (Prevention of Significant Deterioration) for the construction and operation of the 055 West and 055 East Alcohol Quench Processes.

The 055 West and 055 East Alcohol Quench Processes are not listed as unpermitted units because they were permitted via SSM 183-14400-00016, issued July 9, 2003. See State Rule Applicability - 326 IAC 2-2 for details.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on August 30, 1996. Additional information was received on May 3, 1999, July 5, 2001, and June 9, 2003.

A notice of completeness was mailed to the source on October 29, 1996.

Emission Calculations

See Appendix A (pages 1 through 6) of this document for detailed emissions calculations. Note that the source estimated that the aggregate fugitive HAP PTE from the insignificant activities is less than 5.5 tons per year.

Unrestricted Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	greater than 100; less than 250
PM-10	greater than 100; less than 250
SO_2	less than 100
VOC	greater than 250
CO	less than 100
NO_x	less than 100

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential To Emit (tons/year)
any single HAP	less than 10
TOTAL	less than 25

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM-10 and VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2001 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM-10	65.58*
SO_2	0.16
VOC	655.9
CO	8.96
NO_2	35.14

* The reported actual PM10 emissions were overestimated due to inaccurate emission factors. Use of the correct emission factors results in actual PM10 emissions of 16.2 tons.

Potential to Emit After Issuance

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

Limited Potential to Emit (tons/year)							
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
North and South Rotary Furnaces [(a)(b)]	13.5	13.5	0.18	1.46	18.4	9.17	Neg.
Copper Rod and Bar Process (055 West Line) [(a)(b)]	10.9	9.30	0.07	0.7	10.3	12.2	Neg.
Copper Rod and Bar Process (055 East Line) [(a)]	9.31	7.93	0.08	0.71	10.8	12.9	Neg.
Copper Rod and Bar Process (091 Line) [(a)]	11.5	9.79	0.08	0.71	10.8	12.9	Neg.
Alcohol Quench/Mill Emulsion System (055 West Line)	0.03	0.03	0	26.3 [(c)]	0.31	0.37	Neg.
Alcohol Quench/Mill Emulsion System (055 East Line)	0.03	0.03	0	26.3 [(c)]	0.31	0.37	Neg.
Alcohol Quench/Mill Emulsion System (091 Line)	0	0	0	1314.0	0	0	0
Three 17,000 gal Mill Emulsion storage tanks	0	0	0	(e)	0	0	0
Three 7,500 gal quench solution storage tanks	0	0	0	(e)	0	0	0
Insignificant Activities [(d)]	0.37	0.37	0.03	2.5	4.1	4.9	Neg.
Total Emissions	45.6	41.0	0.44	1373	55.0	52.9	Neg.

Neg. - Negligible; less than 0.01 tons per year.
The emissions presented in the table are equal to the controlled potential to emit unless otherwise noted.
(a) The rotary furnaces and copper rod and bar manufacturing processes are subject to the requirements of 326 IAC 6-3-2. See State Rule Applicability - 326 IAC 6-3-2 for the specific emission limitations.
(b) The copper produced by the rotary furnaces and 055 West Copper Bar and Rod Manufacturing Process are limited to render the requirements of 326 IAC 2-2 not applicable. The emissions presented in the table are based on compliance with that limit. See State Rule Applicability - 326 IAC 2-2 for the specific production limits.
(c) The limited VOC PTE for the 055 West and 055 East Alcohol Quench/Mill Emulsion Systems is based on a required minimum 98% control efficiency (pursuant to SSM 183-14400-0016) of the recuperative thermal oxidizer controlling VOC emissions from those facilities.
(d) The combined fugitive emissions from all insignificant activities are not counted towards PSD determination because this source is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980.
(e) Emissions from the storage tanks have been accounted for in the emissions from the Alcohol Quench/Mill Emulsion Systems.

County Attainment Status

The source is located in Whitley County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Whitley County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

(b) Whitley County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

(a) 40 CFR Part 60, Subpart Kb (Volatile Organic Storage Vessels):
The two (2) 17,000 gallon mill emulsion storage tanks, used in conjunction with the 055 West and 055 East Alcohol Quench Processes, are each subject to 40 CFR Part 60, Subpart Kb because the maximum capacity of each tank is greater than 40 m^3 that is used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. Pursuant to this rule, the Permittee must maintain records as required by 40 CFR 60.116(a) and 60.116(b).

These tanks are exempt from the General Provisions (Part 60, Subpart A) and from the provisions of subpart Kb, except as specified in 40 CFR 60.116(a) and 60.116(b), because each tank has a capacity less than 75 m^3.

The 17,000 gallon mill emulsion storage tank, used in conjunction with the 091 Alcohol Quench Process, is not subject to the requirements of 40 CFR Part 60, Subpart Kb, because the tank was constructed prior to July 23, 1984.

The three (3) 7,500 gallon quench solution tanks, and IPA storage tanks with fixed roofs are not subject to 40 CFR 60, Subpart Kb because the maximum capacity of each tank is less than 40 m^3 that is used to store volatile organic liquids.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source. 40 CFR 63, Subpart T (National Emission Standards for Halogenated Solvent Cleaning) does not apply because the degreasing operations do not use halogenated HAP solvents.

(c) The requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) are not applicable to this source because the source is not a major source of hazardous air pollutant (HAP) emissions (i.e., the source does not have the potential to emit 10 tons per year or greater of a single HAP, or 25 tons per year or greater of a combination of HAPs) and the source does not include one or more units that belong to one or more source categories affected by the Section 112(j) MACT Hammer date of May 15, 2002.

(d) This source is subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring. In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant: 1) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and 3) the unit has the potential to emit, of the applicable regulated air pollutant, equal or greater than 100 percent of the amount required for a source to be classified as a major source.

Each Alcohol Quench System and Emulsion System has potential pre-control (but not post-control) VOC emissions that are greater than 100 percent of the amount required for a source to be classified as a major source, are subject to the requirements of 326 IAC 2-2, and 326 IAC 8-1-6 and require the use of a recuperative thermal oxidizer (determined to be BACT) to achieve compliance with the respective limitations. Therefore, each Alcohol Quench Process and Emulsion System is subject to the requirements of 40 CFR Part 64. Pursuant to 40 CFR 64.5(b), the Permittee is required to submit the information required under 40 CFR 64.4 regarding the subject facilities as part of the Part 70 renewal application.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

The Essex Group, Inc.- Metals Processing Center is comprised of two rotary furnaces, three copper bar and rod process lines, identified as the 091 line, the 055 West line, and 055 East line, and a PVC mixing process. Each process line consists of a Copper Rod and Bar Production process, made up of a launder/holding furnace/tundish and rotating casting unit, and an accompanying Alcohol Quench Process (AQP), made up of a Quench System and Mill/Emulsion System. The 091 line was constructed in 1975, the 055 West Line in 1985, and the 055 East line in 1994.

On August 30, 1996, the source submitted a permit application for this part 70 permit. A review of the permit application revealed that the Alcohol Quench Processes, as well as ancillary storage tanks, had been constructed and operated without a permit. The application indicated that the potential VOC emissions from each AQP was in excess of 700 tons per year and the source had been a major PSD source for VOC since promulgation of the PSD rules in 1977- the PTE of the 091 AQP, constructed in 1975, was in excess of 700 tons VOC per year.

On August 4, 1998, IDEM sent a letter to the source indicating that Metals Processing Center was found to be in noncompliance with 326 IAC 2-2 because the 055 West and 055 East AQPs triggered a PSD review when they were installed in 1985 and 1994, respectively. In response, Essex Group, Inc., sent a letter to IDEM stating that the VOC emissions from the 055 West and 055 East AQPs were less than 25 tons per year VOC per line; significantly less than original estimate that was included in the original permit application; and consequently are not subject to the requirements of 326 IAC 2-2 or required to receive a registration. The source submitted an amended permit application on May 3, 1999, to reflect this determination.

On March 6, 2001, the source clarified that the initial VOC emission estimate (>700 tpy VOC) for the AQPs was more accurate than the estimate provided in the letter sent on August 4, 1998. Consequently, OAQ reaffirmed that the 055 West and 055 East AQPs, identified as P-5 and P-6, were subject to the requirements of 326 IAC 2-2 and instructed the source to submit the appropriate permit application.

In order to satisfy the applicable PSD requirements, the source submitted a PSD permit application on May 15, 2001, for SSM 183-14400-00016, to permit the operation of the Alcohol Quench Processes, ancillary storage tanks, and the BACT to control VOC emissions from the 055 West and 055 East facilities and satisfy the requirements of 326 IAC 2-2.

Pursuant to SSM 183-14400-00016, issued July 9, 2003, the Permittee shall comply with the following BACT requirements:

(a) The average VOC (2-Propanol) input to the 055 East and 055 West Alcohol Quench Systems (P-5 and P-6) and 055 East and 055 West Mill Emulsion Systems (P-5 and P-6) shall not exceed 300 pounds per hour per system. Compliance will be determined each calender month by totaling the VOC input to the system for the calender month and dividing by the total operating hours for the calender month.

(b) The recuperative thermal oxidizer, identified as CE-03, shall control VOC emissions from the 055 East and 055 West Alcohol Quench Systems and Mill Emulsion Systems (P-5 and P-6) and achieve a minimum one-hundred percent (100%) capture efficiency and ninety-eight percent (98%) destruction efficiency.

Compliance with these requirements will satisfy the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 8-1-6 (BACT).

Also during the Part 70 permit review process, the OAQ concluded that the total PM emissions from the two (2) rotary furnaces and 055 West Copper Bar and Rod Manufacturing Process, permitted via CP (92) 1577, issued March 21, 1985, were slightly less than 25 tons per year, the relevant PSD threshold. As a result, and to ensure that the requirements of 326 IAC 2-2 remain not applicable, the following limit has been placed on the rotary furnaces and 055 West Copper Bar and Rod Manufacturing Process:

In order to render the requirements of 326 IAC 2-2 not applicable:

(1) The total amount of copper produced by the North and South rotary furnaces shall not exceed 23,800 tons per twelve consecutive month period with compliance determined at the end of each month and 1.13 lb of PM per ton of copper produced. Compliance with this limit is equivalent to less than or equal to 13.5 tons of PM per year.

(2) The amount of copper produced by the 055 West Copper Bar and Rod Manufacturing Process shall not exceed 124,830 tons per twelve consecutive

month period with compliance determined at the end of each month and 0.175 lb of PM per ton of copper produced. Compliance with this limit is equivalent to less than or equal to 10.9 tons of PM per year.

326 IAC 2-4.1 (Hazardous Air Pollutants)

This source is not subject to the requirements of 326 IAC 2-4.1 because it has the potential to emit less than 10 tons per year of any single HAP, and less than 25 tons per year of any combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM10 and VOC. Pursuant to this rule, the owner or operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1st of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

This source is not located in a county listed in 326 IAC 6-5-1(a) and has not added a facility with the potential to emit fugitive particulate matter greater than 25 tons per year, which requires a permit as set forth in 326 IAC 2, after December 13, 1985. Therefore, pursuant to 326 IAC 6-5-1, this source is not subject to the requirements of 326 IAC 6-5.

326 IAC 9 (Carbon Monoxide Emission Limits)

Pursuant to 326 IAC 9 (Carbon Monoxide Emission Limits), the source is subject to this rule because it is a stationary source which emits CO emissions and commenced operation after March 21, 1972. However, under this rule, there are no specific CO emission limitations because the source is not an operation listed under 326 IAC 9-1-2.

326 IAC 10-4 (NO_x Budget Trading Program)

The rotary and vertical shaft furnaces are not subject to 326 IAC 10-4-1 because each unit is not a “large affected unit” as defined in 326 IAC 10-4-2(27). Each is not a “large affected unit” because each does not have a maximum design heat input greater than two hundred fifty million (250,000,000) Btu per hour.

State Rule Applicability - Rotary Furnaces

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from each rotary furnace shall not exceed 5.21 pounds per hour when operating at a process weight rate of 1.43 tons per hour, each. The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = emission rate in pounds per hour; and P = process weight rate in tons per hour

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The rotary furnaces each have a potential to emit SO_2 less than twenty-five tons per year. Therefore, the rotary furnaces are not subject to the requirements of 326 IAC 7-1.1.

326 IAC 8-1-6 (Volatile Organic Compounds - Best Available Control Technology)

The rotary furnaces each have potential VOC emissions less than 25 tons per year. Therefore, the rotary furnaces are not subject to the requirements of 326 IAC 8-1-6.

State Rule Applicability - Copper Rod and Bar Production

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from each copper bar and rod manufacturing process (identified as the 055 West, 055 East and 091 lines) shall not exceed 30.51 pounds per hour when operating at a process weight rate of 20 tons per hour, each.

The pound per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = emission rate in pounds per hour; and P = process weight rate in tons per hour

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The rotary furnaces and vertical shaft furnaces (part of the Copper Bar and Rod Manufacturing lines) each have a potential to emit SO_2 less than 25 tons per year. Therefore, the rotary furnaces and vertical shaft furnaces are not subject to the requirements of 326 IAC 7-1.1.

326 IAC 8-1-6 (Volatile Organic Compounds - Best Available Control Technology)

The 055 West and 055 East Copper Bar and Rod Manufacturing Processes each have potential VOC emissions of less than 25 tons per year. Therefore, the 055 West and 055 East Copper Bar and Rod Manufacturing Processes are not subject to the requirements of 326 IAC 8-1-6.

091 Copper Bar and Rod Manufacturing Process was constructed prior to January 1, 1980 and has potential VOC emissions less than 25 tons per year. Therefore, the 091 Copper Bar and Rod Manufacturing Process is not subject to the requirements of 326 IAC 8-1-6.

State Rule Applicability - Alcohol Quench Processes

326 IAC 8-1-6 (Volatile Organic Compounds: Best Available Control Technology)

The 055 West and 055 East Alcohol Quench Processes (Quench and Emulsion Systems) were constructed after January 1, 1980 and have potential VOC emissions greater than 25 tons VOC per year. Therefore, pursuant to 326 IAC 8-1-6, the systems must reduce VOC emissions using the

Best Available Control Technology (BACT). Pursuant to SSM 183-14400-00016, issued July 9, 2003, compliance with the requirements of 326 IAC 2-2 will satisfy the requirements of 326 IAC 8-1-6 for these facilities. See State Rule Applicability - 326 IAC 2-2 for the specific requirements.

The 091 Alcohol Quench Process (P-3) was constructed prior to January 1, 1980. Therefore, the 091 Alcohol Quench Process is not subject to the requirements of 326 IAC 8-1-6.

326 IAC 8-6 (Organic Solvent Emission Limitations)

The quench solution used in the 091 Alcohol Quench Process (P-3), constructed in 1975, contains 0.2% - 3.0 % Isopropyl Alcohol (2-propanol) by volume. Pursuant to 326 IAC 8-6-2(b)(4)(a), a solvent solution containing less than 5% by volume alcohol is exempt from the provisions of 326 IAC 8-6. Therefore, the requirements of 326 IAC 8-6 are not applicable to the 091 Line Mill Emulsion/Alcohol Quench System.

The 055 West and 055 East Alcohol Quench Processes are subject to the requirements of 326 IAC 8-1-6. Therefore, pursuant to 326 IAC 8-6-1(2), the requirements of 326 IAC 8-6 are not applicable to these facilities.

State Rule Applicability - Specifically Regulated Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations from Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the insignificant welding, brazing, cutting torch, and soldering operations, and the furnaces with a capacity less than 450 cubic inches by volume, shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

326 IAC 8-3-2 (Cold Cleaner Operations)

The cold-cleaner degreasing operations are subject to the requirements of 326 IAC 8-3-2 because they were constructed after January 1, 1980 and are located in Whitley county.

Pursuant to 326 IAC 8-3-2, the Permittee of a cold cleaner degreaser shall:

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Volatile Organic Compounds)

The cold-cleaner degreasing operations conducted at this source, located in Whitley County, were constructed after July 1, 1990. Pursuant to 326 IAC 8-3-5, the degreasing operations are subject to

the requirements of this rule. Therefore, the Permittee shall ensure that the following requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(7) Close the cover whenever articles are not being handled in the degreaser.

(8) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(9) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

326 IAC 8-9 (Volatile Organic Compounds)

None of the tanks located at this source are subject to the requirements of 326 IAC 8-9 because the source is not located in Clark, Floyd, Lake or Porter counties.

Testing Requirements

The North and South rotary furnaces and 055 West Copper Bar and Rod Manufacturing Process were constructed in 1985 via PC (92) 1577, issued March 21, 1985. The PM emissions from these facilities is limited to render the requirements of 326 IAC 2-2 not applicable and testing has not been completed in the last five years. Therefore, PM testing is required to ensure compliance.

Within one hundred and eighty (180) days after issuance of this Part 70 permit, in order to ensure that the requirements of 326 IAC 2-2 do not apply, the Permittee shall perform PM testing on stack S-1 (exhausting emissions from the rotary furnaces) and stack S-2 (exhausting emissions from the 055 West Copper Bar and Rod Manufacturing Process) utilizing methods approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Pursuant to SSM 183-14400-00016, issued July 9, 2003, between January 1, 2004 and July 31, 2004, the Permittee shall conduct a performance test to determine compliance with 326 IAC 2-2 and 326 IAC 8-1-6 for the recuperative thermal oxidizer using methods as approved by the Commissioner. This test shall be repeated at least once every two and one-half (2.5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The rotary furnaces and copper rod and bar manufacturing processes have the following compliance monitoring requirements:

    (a) Visible emission notations of the exhaust from the rotary furnaces and copper bar and rod manufacturing processes (exhausting to stacks S-1, S-2, S-3, and S-4) shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be

expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

(b) The Permittee shall record the total static pressure drop across the baghouse used to control emissions from the rotary furnaces, at least once per shift when the respective facilities are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 to 6.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit. The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

(c) An inspection shall be performed each calender quarter of all bags used to control emissions from the rotary furnaces. Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.

These monitoring conditions are necessary to ensure compliance with the requirements of 326 IAC 6-3-2 and render the requirements of 326 IAC 2-2 not applicable.

2. The Alcohol Quench Processes have the following compliance monitoring requirements:

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer for measuring operating temperature of the recuperative thermal oxidizer. For the purposes of this condition, continuous monitoring shall mean no less often than once per minute. The output of this system shall be recorded as an hourly average. If the continuous monitoring system is not in operation, the temperature will be recorded manually once in a 15-minute period. Nothing in this permit shall excuse the Permittee from complying with the requirement to continuously monitor the temperature of the recuperative thermal oxidizer. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the hourly average temperature of 1456?F. The Permittee shall determine the minimum hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1, as approved by IDEM. The Permittee shall then operate the thermal oxidizer at or above the minimum hourly average temperature as observed during the most recent compliant stack test following approval of that temperature.

(b) The Permittee shall determine the appropriate fan amperage from the most recent valid stack test that demonstrates compliance with limits in Condition D.2.1 as approved by IDEM. The Permittee shall observe the fan amperage at least once per day when the thermal oxidizer is in operation. The oxidizer fan amperage shall

be maintained within the normal range of 206 to 213 amps or as established in the most recent compliant stack test.

These monitoring conditions are necessary to ensure compliance with the requirements of 326 IAC 2-2 and 326 IAC 8-1-6.

Conclusion

The operation of this copper processing plant shall be subject to the conditions of the attached Part 70 Permit No. T183-6488-00016.

Appendix A: Emissions Calculations
From Rotary Furnaces
Company Name: Essex Group, Inc - Metal Processing Center
Address City IN Zip: 2601 South 600 East, Columbia City 46725
Part 70 permit: 183-6488-00016
Reviewer: ERG/BS
Date: 04/11/03

capacity of Rotary Furnace = 2860 lb Cu/hr

Charging/Melting

TYPE OF MATERIAL	Number of Units	Total Throughput LBS/HR		Total Throughput TON/HR (all units)		
Copper	2	5720		2.86		
	PM " lbs/ton Produced	PM10 " lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC " lbs/ton Produced	CO " lbs/tons Produced
	5.62	5.62	0	0	0.16	1.62
Uncontrolled PTE (lbs/hr)	16.1	16.1	0.0	0.0	0.5	4.6
Uncontrolled PTE (lbs/day)	385.8	385.8	0.0	0.0	11.0	111.2
Uncontrolled PTE (tons/year)	70.4	70.4	0.0	0.0	2.0	20.3

Pouring — Rotary Furnace Throughput= 2860 lb Cu/hr

TYPE OF MATERIAL	Number of Units	Total Throughput LBS/HR		Total Throughput TON/HR (all units)		
Copper	1	5720		2.86		
	PM lbs/tons Produced	PM10 lbs/tons Produced	SOx * lbs/tons Produced	NOx * lbs/tons Produced	VOC *** lbs/tons Produced	CO lbs/tons Produced
	--	--	0.02	0.01	--	--
Uncontrolled PTE (lbs/hr)	0	0	0.06	0.029	0	0
Uncontrolled PTE (lbs/day)	0	0	1.37	0.686	0	0
Uncontrolled PTE (tons/year)	0	0	0.25	0.13	0	0

Natural Gas Combustion — Aggregate Heat Input Capacity

MMBtu/hr	MMBtu/MMCF
44	1020

	PM ** lb/MMCF	PM10 ** lb/MMCF	SOx ** lb/MMCF	NOx ** lb/MMCF	VOC ** lb/MMCF	CO ** lb/MMCF
	7.6	7.6	0.60	100	5.5	84
Uncontrolled PTE (lbs/hr)	0.33	0.33	0.03	4.31	0.24	3.62
Uncontrolled PTE (lbs/day)	7.87	7.87	0.62	103.53	5.69	86.96
Uncontrolled PTE (tons/year)	1.44	1.44	0.11	18.89	1.04	15.87

Wood Combustion — Maximum Quantity Wood Burned

ton/yr
418

	PM ** lb/ton	PM10 ** lb/ton	SOx ** lb/ton	NOx ** lb/ton	VOC ** lb/ton	CO ** lb/ton
	8.8	8.8	0.08	1.5	0.2	13.6
Uncontrolled PTE (lbs/hr)	0.42	0.42	0.00	0.06	0.01	0.59
Uncontrolled PTE (lbs/day)	10.08	10.08	0.08	1.55	0.23	14.08
Uncontrolled PTE (tons/year)	1.84	1.84	0.02	0.28	0.04	2.57
Total Uncontrolled Emissions (tons/yr)	73.68	73.68	0.38	19.30	3.09	38.73
TOTAL CONTROLLED PTE (tpy per furnace) ^	7.09	7.09	0.19	9.65	1.54	19.37
Limited PTE (tpy per furnace) ^^	**6.74**	**6.74**	**0.18**	**9.17**	**1.47**	**18.40**

* Emission factor from FIRE 6.01

** Emission factor from AP-42, 5th Ed.

*** Emission factor provided by the source based on mass balance

" Emission factors provided by the source based on stack test data and mass balances.

^ The controlled PTE is based on 85% capture efficiency and 95% control efficiency per the source.

^^ The limited PTE the the controlled PTE after compliance with the production limit.

The rotary furnaces are used to melt and fire-refine enamel coated copper magnet wire, shavings, sweepings, and other non-chemically pure copper wire. PVC coated copper is no

The furnaces primary fuel is natural gas; they also burn wood.

Note that the wood burned in the furnaces is wood used from poling; a method by which the oxygen level in the copper bath is reduced by adding wood.

Appendix A: Emissions Calculations
Emissions from Copper Rod and Bar Production (091 Line)
Company Name: Essex Group, Inc - Metal Processing Center
Address City IN Zip: 2601 South 600 East, Columbia City 46725
Part 70 permit: 183-6488-00016
Reviewer: ERG/BS
Date: 04/11/03

Foundry Emissions (foundry emissions from vertical shaft furnace and soot emissions from casting)

TYPE OF MATERIAL	Control	Production Capacity ton/hr
Pure Copper Cathode	none	15

	PM * lbs/ton Produced	PM10 * lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO lbs/tons Produced
	0.175	0.149	-	-	-	-
Uncontrolled PTE (lbs/hr)	2.6	2.2	0.0	0.0	0.0	0.0
Uncontrolled PTE (lbs/day)	63.0	53.6	0.0	0.0	0.0	0.0
Uncontrolled PTE (ton/yr)	11.5	9.8	0.0	0.0	0.0	0.0

Natural Gas Combustion (from melt furnace, tundish, launders, and holding furnace)

Aggregate Heat Input Capacity MMBtu/hr	MMBtu/MMCF
30	1020

	PM * lb/MMCF	PM10 * lb/MMCF	SOx *** lb/MMCF	NOx *** lb/MMCF	VOC *** lb/MMCF	CO*** lb/MMCF
	-	-	0.60	100	5.5	84
Uncontrolled PTE (lbs/hr)	0.00	0.00	0.02	2.94	0.16	2.47
Uncontrolled PTE (lbs/day)	0.00	0.00	0.42	70.59	3.88	59.29
Uncontrolled PTE (ton/yr)	0.00	0.00	0.08	12.88	0.71	10.82
TOTAL Potential to Emit (ton/yr)	**11.50**	**9.79**	**0.08**	**12.88**	**0.71**	**10.82**

* Emission factors provided by the source based on results from stack testing.

*** Emission Factors from AP-42, 5th Ed, Ch 1.4

Appendix A: Emissions Calculations

Emissions from Copper Rod and Bar Production (055 West Line)

Company Name: **Essex Group, Inc - Metal Processing Center**

Address City IN Zip: **2601 South 600 East, Columbia City 46725**

Part 70 permit: **183-6488-00016**

Reviewer: **ERG/BS**

Date: **04/11/03**

Foundry Emissions (foundry emissions from vertical shaft furnace and soot emissions from casting)

TYPE OF MATERIAL	Control	Production Capacity ton/hr
Pure Copper Cathode	none	15

	PM * **lbs/ton Produced**	**PM10 *** **lbs/ton Produced**	**SOx** **lbs/ton Produced**	**NOx** **lbs/ton Produced**	**VOC** **lbs/ton Produced**	**CO** **lbs/tons Produced**
	0.175	0.149	-	-	-	-
Uncontrolled PTE (lbs/hr)	2.6	2.2	0.0	0.0	0.0	0.0
Uncontrolled PTE (lbs/day)	63.0	53.6	0.0	0.0	0.0	0.0
Uncontrolled PTE (ton/yr)	11.5	9.8	0.0	0.0	0.0	0.0

Natural Gas Combustion (from melt furnace, tundish, launders, and holding furnace)

Aggregate Heat Input Capacity MMBtu/hr	MMBtu/MMCF
30	1020

	PM * **lb/MMCF**	**PM10 *** **lb/MMCF**	**SOx ***** **lb/MMCF**	**NOx ***** **lb/MMCF**	**VOC ***** **lb/MMCF**	**CO***** **lb/MMCF**
	-	-	0.60	100	5.5	84
Uncontrolled PTE (lbs/hr)	0.00	0.00	0.02	2.94	0.16	2.47
Uncontrolled PTE (lbs/day)	0.00	0.00	0.42	70.59	3.88	59.29
Uncontrolled PTE (ton/yr)	0.00	0.00	0.08	12.88	0.71	10.82
TOTAL PTE (ton/yr)	11.50	9.79	0.08	12.88	0.71	10.82
**Limited PTE (ton/yr) ** **	**10.92**	**9.30**	**0.07**	**12.24**	**0.67**	**10.28**

* Emission factors provided by the source based on results from stack testing.

** The limited PTE is the PTE after compliance with the production limit.

*** Emission Factors from AP-42, 5th Ed, Ch 1.4

Appendix A: Emissions Calculations
Emissions from Copper Rod and Bar Production (055 East Line)
Company Name: Essex Group, Inc - Metal Processing Center
Address City IN Zip: 2601 South 600 East, Columbia City 46725
Part 70 permit: 183-6488-00016
Reviewer: ERG/BS
Date: 04/11/03

Foundry Emissions (foundry emissions from vertical shaft furnace and soot emissions from casting)

** The maximum capacity of the 055 East line, and the vertical melt furnace, is 131,400 tons per year. This capacity is served by either the 055 East vertical shaft furnace (for clean scrap) or the rotary furnaces (for dirty scrap). Therefore, the 055 East vertical shaft furnace can not operate when the rotary furnaces are in operation and serving the 055 East line, and vice versa. As a worst case, the emission calculations presented below assume that the rotary furnaces operate at maximum capacity (25,000 tons per year) and the vertical shaft furnace operates to make up the difference of the 055 East line's capacity (131,400 - 25,000 = 106,400 tons per year or 81% capacity). Therefore, the production capacity of the vertical shaft furnace (accounting for the operation of the rotary furnaces) is: 15 ton/yr x 81% = 12.15 ton/hr

TYPE OF MATERIAL	Control	Production Capacity** ton/hr
Pure Copper Cathode	none	12.15

	PM * lbs/ton Produced	PM10 * lbs/ton Produced	SOx lbs/ton Produced	NOx lbs/ton Produced	VOC lbs/ton Produced	CO lbs/tons Produced
	0.175	0.149	-	-	-	-
Uncontrolled PTE (lbs/hr)	2.1	1.8	0.0	0.0	0.0	0.0
Uncontrolled PTE (lbs/day)	51.0	43.4	0.0	0.0	0.0	0.0
Uncontrolled PTE (tons/year)	9.31	7.93	0.0	0.0	0.0	0.0

Natural Gas Combustion (from melt furnace, tundish, launders, and holding furnace)

Aggregate Heat Input Capacity MMBtu/hr	MMBtu/MMCF
30	1020

	PM * lb/MMCF	PM10 * lb/MMCF	SOx *** lb/MMCF	NOx *** lb/MMCF	VOC *** lb/MMCF	CO*** lb/MMCF
	-	-	0.60	100	5.5	84
Uncontrolled PTE (lbs/hr)	0.00	0.00	0.02	2.94	0.16	2.47
Uncontrolled PTE (lbs/day)	0.00	0.00	0.42	70.59	3.88	59.29
Uncontrolled PTE (ton/yr)	0.00	0.00	0.08	12.88	0.71	10.82
TOTAL Potential to Emit (ton/yr)	**9.31**	**7.93**	**0.08**	**12.88**	**0.71**	**10.82**

* Emission factors provided by the source based on results from stack testing.

*** Emission Factors from AP-42, 5th Ed, Ch 1.4

Appendix A: Emissions Calculations
Alcohol Quenching and Mill Emulsion Process
Company Name: Essex Group, Inc - Metal Processing Center
Address City IN Zip: 2601 South 600 East, Columbia City 46725
Permit #: 183-6488-00016
Reviewer: ERG/BS
Date: 04/11/03

Alcohol Quenching and Mill Emulsion
055 East Line

TYPE OF MATERIAL	Maximum operating hours	Control Efficiency**
2-PROPANOL	8760	98.0%

	PM lbs/hr	PM10 lbs/hr	SOx lbs/hr	NOx lbs/hr	VOC * lbs/hr	CO lbs/hr
	-	-	-	-	300	-
Potential Emissions (lbs/hr)	0.0	0.0	0.0	0.0	300.00	0.0
Potential Emissions (tons/year)	0.00	0.00	0.00	0.00	1314.00	0.00
Controlled Emissions (tons/year)	0.00	0.00	0.00	0.00	26.28	0.00

Alcohol Quenching and Mill Emulsion
055 West Line

TYPE OF MATERIAL	Maximum operating hours	Control Efficiency**
2-PROPANOL	8760	98.0%

	PM lbs/hr	PM10 lbs/hr	SOx lbs/hr	NOx lbs/hr	VOC * lbs/hr	CO lbs/hr
	-	-	-	-	300	-
Potential Emissions (lbs/hr)	0.0	0.0	0.0	0.0	300.00	0.0
Potential Emissions (tons/year)	0.00	0.00	0.00	0.00	1314.00	0.00
Controlled Emissions (tons/year)	0.00	0.00	0.00	0.00	26.28	0.00

Alcohol Quenching and Mill Emulsion
091 Line

TYPE OF MATERIAL	Maximum operating hours	Control Efficiency**
2-PROPANOL	8760	0.0%

	PM lbs/hr	PM10 lbs/hr	SOx lbs/hr	NOx lbs/hr	VOC * lbs/hr	CO lbs/hr
	-	-	-	-	300	-
Potential Emissions (lbs/hr)	0.0	0.0	0.0	0.0	300.00	0.0
Potential Emissions (tons/year)	0.00	0.00	0.00	0.00	1314.00	0.00
Controlled Emissions (tons/year)	0.00	0.00	0.00	0.00	1314.00	0.00
TOTAL EMISSIONS (after controls in tons	**0.00**	**0.00**	**0.00**	**0.00**	**1366.56**	**0.00**

* Emission factor provided by source based on mass balance calculations.

** The 055 East and 055 West Quench Lines are controlled by a recuperative thermal oxidizer with a minimum control efficiency of 98%
Emissions from the storage tanks have been accounted for in the emissions from the alcohol quenching and emulsion.

METHODOLOGY

Potential Emissions (tpy) = VOC throughput (lb/hr) x 8760 (hr/yr) x 1/2000 (ton/lb)

Controlled Emissions (tpy) = Potential Emissions (tpy) x (1- Control Efficiency (%)/100)

Appendix A: Emissions Calculations
Emissions from Insignificant Activities
Company Name: Essex Group, Inc - Metal Processing Center
Address City IN Zip: 2601 South 600 East, Columbia City 46725
Part 70 permit: 183-6488-00016
Reviewer: ERG/BS
Date: 04/11/03

Emissions from Insignificant Natural Gas Combustion

Aggregate Heat Input Capacity

11.2	MMBtu/hr	Potential Throughput:	98.1	MMCF/yr	11,200	MMCF/hr

Criteria Pollutants

Pollutant	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.37	0.37	0.03	4.91	0.27	4.12

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

METHODOLOGY

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu; MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4,

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton